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ABSTRACT

Formal worker participation schemes, such as the quality circles and related employee involvement schemes that have been introduced in 75 percent of Fortune 500 companies, are likely to have a lasting impact on the way many organizations work. In a majority of empirical studies, direct participation is associated with at least a short-run improvement in satisfaction, commitment, quality, productivity, turnover, and/or absenteeism. In almost no cases does participation make things worse. Sustained long-term improvements in performance occur only when (1) participative groups are given the information and authority to make substantial changes in the workplace; (2) supervisory behavior is altered so that formal participation is consistent with the way things are usually done; (3) workers and managers are rewarded for increased responsibility and productivity; (4) job security and guarantees of individual rights make workers feel free to participate; and (5) employees believe that participation is not merely a means of speed-up or a threat to their jobs or union. The government should subsidize research and demonstration projects, introduce participation within federal agencies, and revise the National Labor Relations Act to make it clear that participation programs are legal in both union and nonunion settings, as long as their purpose is neither to bypass nor to avoid unions. (73 references) (CML)

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35b. EMPLOYEE PARTICIPATION AND INVOLVEMENT

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Workers' participation and job involvement have been topics of continuing recent interest to management, organized labor, and government policy makers. Participation has been widely advocated as helping to solve a number of serious national problems -- low quality and productivity, resistance to change, job dissatisfaction, and poor labor-management relations, among others.

Given this interest, it is understandable that there has been widespread experimentation with various forms of participation. A plausible estimate is that Quality Circles and related employee involvement schemes have been introduced in 75 percent of the Fortune 500 (E.E. Lawler, personal communication, 1989) Though something of a fad, and certainly not an organizational cure-all, formal participation schemes are likely to have -- and should have -- a lasting impact on the way many organizations work.

Why have participation schemes excited such interest? How successful have they been in practice? What problems have they faced and how might these problems be resolved? What are the policy implications -- for management, unions, and the government -- of our experience to date? These are the main questions which this paper will consider.

But first we should stress that there are many forms of participation and participation comes under many names: quality of worklife, quality circles, autonomous work groups, joint productivity groups, worker membership on company boards of directors, among others. (Other papers in this series discuss related topics including profit sharing, Employee Stock Ownership Plans (ESOPs), and producers' cooperatives.) While we will primarily be discussing formal participation schemes planned by management, we will emphasize that such schemes are likely to survive or flourish only if informal participation is already part of the culture.

Background

A brief history

In the 1920's the British Industrial Health Research Council's pioneering research (e.g., Wyatt and Langdon, 1933) showed that work could made more meaningful in ways which would increase satisfaction, productivity and quality. However, large-scale academic interest in participation dates from the famous Hawthorne-Western Electric Experiments.

Shortly afterwards a series of experiments by Lewin (e.g., 1953) and his students contributed to the belief that participatory groups were more productive than non-participatory ones, and that decisions made participatively were more likely to be implemented than those made autocratically. Other work by the Likert group at Michigan was consistent with these findings (e.g., 1961). The advantages of worker participation were widely taught in business schools.

The 1970's brought widespread national concern with "blue collar blues," in part stimulated by a strike by young workers at a Lordstown G.M. plant that was attributed to the alienating conditions of assembly line work. Some observers noted a "revolt against work," particularly among younger, better educated workers (Work in America, 1973, p. 186).

Meanwhile highly influential studies by Hackman and Lawler (1971) found that some job characteristics (such as autonomy) were closely connected with both productivity and satisfaction. Thus, they concluded, job redesign might increase job satisfaction and raise productivity. At the same time there was much interest in the U.S. in the concept of socio-technical system as developed by Trist et al. (1963) in England and Emery and Thorsrud (1969) in Norway. Abroad, this interest contributed to the introduction of autonomous work groups into the assembly lines at Volvo and Saab.

Even before this, a few progressive U.S. companies had begun to experiment with various forms of participation, finding in most cases that these had a positive impact on productivity, satisfaction, and adaptability to change (Coch and French, 1948; Morse and Reimer, 1956; Marrow, Barrows and Seashore, 1967). By the 1970's the terms job enrichment and quality of worklife (QWL) became popular, and experiments in workers' participation, began to spread to mainline companies such as AT&T (Ford, 1969), Texas Instruments (Myers, 1970) and General Foods (Walton, 1980).

Aside from AT&T, much of the early experimentation was in new non-union plants, especially in the Southwest. Unions remained generally skeptical. By 1973, however, the national agreements negotiated by the

U.A.W. and the major auto manufacturers contained provisions endorsing QWL programs. A few auto plants experimented with QWL, but widespread adoption of QWL programs in unionized plants had to wait until the recession of the early 1980's.

By the 1980's a number of centers -- both public and private -- were established to disseminate experience and skills for making participation work (Cole, 1989). These include, among others, the Bureau of Labor-Management Relations and Cooperative Programs of the U.S. Department of Labor, the Work in America Institute, the Cornell School of Industrial and Labor Relation's Program for Employment and Workplace Systems, and the American Productivity Center.

Since 1980 consultative participatory schemes such as quality circles have emerged from the experimental stage and have been increasingly adopted by industry. There has also been a modest (but steady) increase in substantive participation, such as work teams.

Why this recent popularity?

1. Interest in Japanese management has mushroomed. Various forms of participation, especially quality circles, are seen as the secret of Japanese success.

2. Influenced by books such as Peters and Waterman's In Search of Excellence (1982), American managers have shown particular attention to "organizational culture" and especially to high commitment policies designed to develop broadly trained employees who identify with the organization and who are prepared and trusted to exercise high orders of discretion. Key components of this policy are heavy investments in

human capital, substantial job security, career flexibility, and new forms of compensation.

3. In an increasing number of cases participation is required by a fast-changing technology. Though some high-technology jobs are completely routine, many new jobs require broadly trained employees who are committed to their work and prepared to exercise high orders of discretion.

4. Economic pressures -- such as the 1982 recession, increased foreign competition, and the impact of deregulation -- convinced many managers and unions that almost heroic efforts were needed to cut costs, preserve jobs and prevent bankruptcy. Participatory schemes were viewed as means of working together for mutual survival.

5. In face of imminent job loss many unions agreed to substantial concessions in wages, fringes, and work rules. As a quid pro quo for these concessions, unions often insisted that management give them greater influence in determining organizational policies, frequently through the assignment of limited managerial responsibilities to joint committees, but also through stock ownership or union representation on company boards of directors.

6. Workers are changing. They are better educated, and many have learned to expect and even demand opportunities for participation.

7. Perhaps the most important reason for the spread of participation has been management's increased efforts to increase flexibility and reduce costs. Job enrichment and autonomous work groups, in particular, help break down rigid job classifications and work rules. Further, participative schemes help elicit employees'

suggestions for making work more efficient. Saving management money -- rather than making workers happy -- has been the main purpose of most recent change.

The Theory

There have been elaborate theoretical explanations of the virtues and weaknesses of participation (e.g., Lowin, 1968; Locke and Schweiger, 1979). More relevant to this paper are the reasons why participation usually raises productivity and/or satisfaction while making better use of the workforce, stressing that it doesn't always work.

1. Participation may result in better decisions. Workers often have information which higher management lacks. Further, participation permits a variety of different views to be aired. On the other hand, workers may be less informed than managers, and the premises upon which they make their decisions may be different. Also, if decisions are made by groups, reaction to changing environments may be particularly slow.

2. People are more likely to implement decisions they have made themselves (Porter, Lawler, and Hackman, 1975). Not only do they know better what is expected of them, but helping make a decision commits one to it (Staw and Ross, 1978). On the other hand, once becoming committed to a decision, employees may be reluctant to change it.

3. The mere process of participation may satisfy such non-pecuniary needs as creativity, achievement, and social approval. On the other hand, not everyone has strong desires for creativity and achievement, or they satisfy these sufficiently off the job.

4. Participation may improve communications and cooperation; workers communicate with each other rather than requiring all communications to flow through management, thus saving management time. On the other hand, participation is time consuming.

5. Participative workers supervise themselves, thus reducing the need for full-time supervisors, and so reducing overhead labor costs.

6. Participation enhances people's sense of power and dignity. This reduces the need to show one's power through fighting management and restricting production. On the other hand, once a precedent of participation is established, withdrawal of the "right" to participate becomes difficult.

7. Participation increases loyalty and identification with the organization, especially if the group's suggestions are implemented. On the other hand, cohesive, participative groups may unite against management to restrict production and prevent change.

8. Participation frequently results in the setting of goals. There is considerable evidence that goal setting is an effective motivational technique (Latham and Yukl, 1975).

9. Participation teaches workers new skills, and helps train and identify leaders.

10. If participation takes place in a group setting, a new element is added: group pressure to conform to decisions adopted (Strauss, 1977).

11. When union and management leaders jointly participate to solve problems on a non-adversarial basis, the improved relationship may spill over to improve union-management relations.

Obviously, participation is not without its disadvantages. In addition to those mentioned above, there are costs of retraining employees and managers and, perhaps, of redesigning technology. On balance, however, the advantages of participation outweigh the disadvantages for most workplaces. Thus, participation, if properly introduced, can be a powerful tool for increasing productivity.

Forms of participation

Here we briefly describe the major forms of participation existing in the United States, reserving for a later section a description of participation in other countries. Our discussion begins with the simplest forms of participation, involving individual workers only, moves on to group participation at the workplace levels, and concludes with representative participation at the plant and organizational levels. These forms of participation are by no means exclusive, and there can be important interactions among them. (Participation in ownership and in profits are discussed in other papers in this series.)

Academics have created elaborate typologies of participation (e.g., Strauss (1982)). Typical dimensions include the level of participation (shopfloor vs. representative), the topics of participation (job design, pay, and so forth), the power of the participatory body (consultative, joint decision-making, and so forth) and the extent of worker ownership. The discussion below focuses on the most common types of participation.

Job Redesign

As we use the term here, job redesign programs involve altering the nature of the workers' assignments to give them a greater sense of involvement in their work. The main variations include job rotation, job enlargement, and job enrichment.

Job rotation. This most simple form of workplace reform permits employees to switch jobs without changing the characteristics of the job itself. Thus employees gain variety in their work and perhaps in the social relations.

Job enlargement. This approach combines tasks "horizontally." Employees are given "whole tasks" and permitted to follow a job from beginning to end.

Job enlargement may be associated with "broad banding", the combining of what were once separate job classifications. At the joint GM-Toyota plant (NUMMI) in Fremont, California all the unskilled job classifications have been combined into a single one. (While job enlargement may require broad banding, the reverse need not be true. Broad banding may merely give management greater flexibility in rotating workers from one narrow task to another).

Job enrichment. This approach goes beyond job enlargement by adding "vertical" or quasi-managerial elements, especially planning, supply, and inspection. Thus, it contributes to the employees' sense of autonomy and control over their work. For example, employees may control the speed of the machines they run and even turn these off for short periods; operators may maintain their own equipment; lab

technicians may sign their own reports, rather than have bosses check them; maintenance people may decide priorities of repair tasks.

Example: Job enrichment was applied to the work of clerks who were assembling telephone directories. Before the change, directories were assembled on a production line basis. Work was passed from clerk to clerk for a total of 21 steps, many of which were merely for verification. After the change, each clerk was given complete responsibility for assembling either an entire directory and or alphabetical part of one, thus combining 21 jobs into one. Follow up checkers were eliminated because employees were expected to check their own work for accuracy. The clerks were permitted to talk directly to advertising sales representatives to clear up ambiguity in the copy, thus bypassing their bosses. Finally, they set the deadline dates after which copy would not be accepted for the next directory issue. As a result turnover dropped, fewer errors were made, and more work was done with fewer people (Ford, 1973).

Participative Work Groups

Most of the recent discussion regarding participation has involved groups of workers dealing with workplace problems. The best known of these are quality circles and autonomous work teams.

Quality circles. Quality circles (QCs -- sometimes called job involvement programs) typically consist of small voluntary groups of employees from the same work area who meet together on a fairly regular basis to identify and solve quality, productivity, and other problems. (Typically about 25 percent of the workforce participates in such

committees.) Sometimes their supervisor acts as their chair. Other times it is a staff "facilitator" or an employee. Frequently members of the group and the chair receive special training in such subjects as group dynamics and problem solving. Despite their name, QCs often deal with subjects other than quality; for example, work flow, productivity, safety, and employees' welfare generally.

Example: A not untypical success story involved a group of assemblers in a Silicon Valley factory. The job required constant reaching and bending and was particularly difficult for shorter women. Turnover and absenteeism were high, quality of work low, and complaints of back strain frequent. The QC which was established included one member who had worked on a similar assembly line in another company. Based largely on her suggestions, the assembly line was tilted, permitting easier access. Further, instead of being required to stand, employees were given stools which were adjustable to their height and permitted easy movement with the work flow. With these and other changes, most of the original problems were eliminated.

Sometimes QCs evolve into autonomous work teams, the difference being that within defined limits autonomous work teams can implement their decisions, while QCs can only make recommendations to management.

Autonomous Work Teams. Autonomous work teams are in a sense a group counterpart of job enlargement and job enrichment, in that employees are given wide discretion to organize their own work and operate with very little supervision. Typically, these groups make

their own work assignments and determine their own work routines, subject to overall workflow requirements.

Work teams have been given responsibility for developing relations with vendors, determining which operations can be handled individually and which by the group as a whole, setting work pace (perhaps fast in the morning and slow in the afternoon), training new employees, and at one company, even keeping financial records. Sometimes work team members serve in roles normally reserved for staff personnel or supervisors: chairing the plant safety committee, redesigning work equipment, or troubleshooting customers' problems. At times the job of supervisor is rotated among members of the group. When the new G.M. Saturn plant opens up, "councilors" (first-line supervisors) are to be elected by their subordinates.

Example: The Topeka Gaines dog food plant (once owned by General Foods and now by Quaker Oats) was set up with work teams of 7 to 14 members. Activities usually handled by separate groups, such as quality control, maintenance, janitorial work, and industrial engineering became the responsibility of the group as a whole. Individual jobs were often rotated, but key decisions were made on a group basis. Initially, each employee was paid the same rate, with pay increases being given when the group decided that one of its members had picked up additional skills. The group screened new job applicants and apparently even "expelled" (discharged) poor performers (Walton, 1980).

Example: One of the more successful recent turnabouts in American industry occurred at NUMMI, the joint GM-Toyota venture

located at a former GM plant in Fremont, California. The plant had been plagued with serious problems with drugs, absenteeism, and very poor labor relations. Employing mostly the same technology and workers as the old plant, NUMMI now has zoomed to the top of U.S. auto plants in productivity and lowest in absenteeism. Here "work teams" are responsible for planning job rotation, balancing work assignments to equalize work loads, and engaging in what the Japanese call kaizen ("continuous job improvement"). Team leaders, who remain union members, are selected on the basis of recommendations of joint union-management committee.

Representative Committees

By contrast with the workplace participative groups just discussed, representative committees deal with issues involving more than a single department. The employee members of such committees are elected or appointed to speak for the larger body of workers. Such committees exist in both union and non-union sectors, although they are typically less influential in the non-union sector.

Joint union-management committees were fairly common in American industry well before the concession-bargaining era, especially during wartime and recessions, periods when labor and management objectives appear more congruent (Jacoby, 1985). Traditionally such committees dealt with matters that were considered peripheral to the main collective bargaining relationship, such as safety, training, and scrap reduction, where the interests of the parties were seen to be sufficiently alike that they could be resolved in a non-adversarial way.

Recently joint committees have proliferated, especially in the automobile industry, and they have been given more important duties. They operate at both the company and plant levels. Some of these committees deal primarily with issues affecting individual welfare.

Example: The Labor/Management Productivity Council established by the city government of Oakland, California, and its union has considered such topics as comparable worth, physical fitness programs, employee service recognition, child care, and training. It has also worked on getting special chairs for employees working on video terminals and new equipment for parking meter checkers, as well a "stay well" program designed to encourage workers to stop smoking and improve their nutrition.

Other representative committees have been charged generally with enlisting worker ideas and energies to reduce costs, improving productivity and quality, and facilitating teamwork. For example, three joint committees were established at Xerox to study work flow problems, equipment purchases, and inventory controls respectively. Their recommendations are credited with saving 180 jobs (Klinger and Martin, 1988). In New York's Sanitation Department a joint "Labor Team", including representatives of several unions helped save over $8 million a year through granting workers' greater discretion and increasing efficiency in the truck maintenance unit (Kusnet, 1989).

Membership on company boards of directors. Union representatives have served on the boards of Chrysler and American Motors, Pan American, Eastern and Western Airlines, Wilson Foods, and several financially troubled steel and trucking firms. In addition there are employee directors (not always selected by the union) in a considerable number of

ESOP and buyout situations, as described in other papers in this series. As has been the experience in other countries (Strauss, 1982) employee directors in the U.S. have not been very important (Stern, 1988). They have been handicapped by rules keeping board deliberations confidential, thus restricting them from communicating with constituents. Directors from the shop floor lack the technical expertise to make contributions in areas such as finance. Regardless of the employee director's skill, management can usually keep key issues to employees off the board's agenda. In any case, boards, which meet as infrequently as once a quarter, may exert little real influence.

Scanlon Plan. With a 50-year history, the Scanlon Plan is the oldest of the programs discussed here. Joining participation with gain sharing, the Plan represents an effort to elicit employee ideas for increasing productivity through combining direct and indirect participation with financial incentives.

The typical plan provides for shop floor "production committees" (much like QCs) which meet periodically to discuss suggestions from individual employees and to formulate general plans for improving productivity. Rejected suggestions or suggestions that affect the plant as a whole are referred to plant-wide "screening committees" which include top management as well as employees and union leadership. Savings due to increased productivity are shared by employees and company. Since bonuses are paid on a plant-wide basis, success of the plan depends heavily on the development of cooperative relationships among all the employees, line managers, and staff in the plant.

Participation in other countries

The U.S. was a relative late comer in the participation field. Workplace participation became common in Scandinavia and the Netherlands over 15 years ago. Though actually an American invention, quality circles had their first widespread use in Japan. Currently, at least 20 percent of Japanese workers regularly participate in QC-type activities (Cole, 1989).

Works councils, required by law in most Western European countries for middle and large size companies, typically are directly elected by employees. In France these councils function mainly in the health, welfare, and safety areas. In most nations management is required to consult with these councils on many issues, while in some cases management cannot move ahead without the council's approval.

Worker and/or union representatives serve on company boards of directors in many European countries. Worker representatives are almost everywhere in the minority. Nevertheless, in some cases they have considerable influence on broad policies. In West German coal and steel industries, labor and management are equally represented on the board, with a neutral third party breaking the rare deadlocks.

Union-management joint consultative committees are common in Japan. In some companies these committees engage in traditional collective bargaining. In other companies the bargaining and consultative functions are kept separate. Quite often management shares confidential information with these committees, including details of major new investments and changes in policy. Further, management normally revises its plans when faced with strong union objections (Morishima, in press).

Worker owned and controlled producers' cooperatives are fairly common in Europe and Israel, with the most famous being the Israeli kibbutzim. Employees in Yugoslavia elect works councils, which in turn select management (though with some constraints). Among the most successful worker owned and controlled organizations is the Mondragon complex in Spain. This is a loose rapidly-growing federation of companies (with employee-elected directors) and associated educational and financial institutions.

Why has participation become so common overseas? The reasons vary. In many cases it is political or ideological. Participation has been introduced to further national goals (as in Yugoslavia), to reduce union-management tensions (Germany), and to substitute for scarce management (Yugoslavia). In Sweden the motivation was partly economic as well as ideological: with full employment workers were unwilling to work on traditional assembly lines. In almost every case there was hope that participation would increase productivity.

Extent and Experience

Extent of participation. It is difficult to obtain reliable data as to the extent to which participative schemes have been introduced into American industry. In the first place, there are no standard definitions as to what is to be counted. For example, a well-publicized 1982 survey conducted by the New York Stock Exchange found that 53 percent of the firms listed on the exchange had a program using some "Employee Involvement/QWL components", but among these were "formal training and instruction" (25 percent) and "employee appraisal and feedback" (23 percent) -- useful techniques, but not what we would call

"participative". Only 14 percent of these firms (22 percent in manufacturing) had QC's (Freund and Epstein, 1984).

Secondly, most reports indicate only whether a company has at least one specified program somewhere in existence. Further, a report may indicate whether a given program exists on paper, not whether it is really alive and well.

Estimates based on fairly reliable samples suggest that up to 50 percent of unionized manufacturing firms enjoy some sort of joint participative scheme, with the great bulk of these being established after 1980 (Cooke, 1987, Voos 1987). After a through survey of the data, Gershenfeld concludes "Fully operational EI/QWL are found in a minority of American organizations, but their number are increasing and may now be 10-15 percent of such organizations" (1987, p. 155).

The most that we can conclude is that experimentation with participation plans increased rapidly during the 1980's and that during this period a majority of large companies introduced these somewhere in their organization; nevertheless, functioning plans currently exist in only a fairly small minority of individual plants and offices. Further, any figures as to the number of plans may give a misleading impression as to the number of workers involved. A variety of reports suggest that it is rare for more than a quarter of the workers in any plant to take part in QCs or similar activities (e.g., Griffin, 1988; Verma, 1987).

Effects of participation. Research as to the overall success of these various forms of participation is difficult to conduct. Perhaps the most important problem is that, in a dynamic organization, it is hard to distinguish changes due to participation from changes which might have occurred anyway. Further, participation plans differ widely

in their form, objectives, and environments -- making them very difficult to evaluate.

Much of the early research was based on single case studies, consultants' reports of their own successes, and anecdotal reports without quantitative data. Recently there have been an increasing number of more rigorous studies, many with careful controls, as well as some careful summaries ("meta-analysis") of the various data. Based on these some tentative conclusions are possible:

1. A majority of studies find that the introduction of shop floor participation (job redesign and participative work groups) leads to at least a short-run improvement in one or more of the following variables: satisfaction, commitment, quality, productivity, turnover, and absenteeism (Cotton et al. 1988; Griffin, 1988; Marks et al., 1986; Miller and Monge, 1986; Wagner and Gooding, 1987; Levine and Tyson, 1989). In almost no cases does participation make things worse. The changes in productivity tend to be less than changes in satisfaction and turnover (contra Cotton et al., 1988). Similar conclusions can be drawn from European data (Strauss, 1982, p. 243-44).

2. The few studies of the impacts of representative participation suggest that this form of participation alone has little influence on either satisfaction or productivity (Strauss, 1982; Cotton et al., 1988; but see Schuster, 1983; Morishima, in press). The main impact of representative participation alone may be through reducing resistance to change, improving communications and labor-management relations, and facilitating the handling of personal grievances.

3. Some limited but suggestive research suggests that shop-floor participation is unlikely to contribute to substantially increased

productivity unless such participation leads to actual "modifications in the organization of work"; that is, there must changes in job assignments, workflow, and the like. (Kochan, McKersie and Katz, 1985. For further detail see Paper 35A in this series.)

4. A major, disturbing finding is that few programs last more than four years. After a "honeymoon", they "peak and peter out" (Accordino, in press; Griffin, 1988; Cammann et al., 1984; Schuster, 1984)

In short it is reasonably clear that participation can "work" under the appropriate circumstances, but initial success is typically greater than long-run success. The main questions, then, are why is the survival rate so low; and under what circumstances will participation survive and increase performance? Our fictional account of QCs at IndCo may suggest some of the problems that participation plans encounter. We will then discuss how successful participation plans have overcome these problems.

Quality Circles at IndCo

Having heard from a friend how quality circles had reduced defect rates and increased productivity at his plant, the CEO of IndCo resolved that his own company would not be the last in the industry to adopt this new approach. Besides he understood that QCs were responsible for much of his Japanese competitors' success. More recently, he had read in Business Week how leading companies throughout the country were introducing QCs.

And so an expensive consultant was hired. On her recommendation, volunteers were recruited in each department with instructions to meet on a weekly basis to discuss problems relating to working conditions,

quality, safety, and productivity. Departmental supervisors were expected to act as "facilitators" for these QCs. To equip them for this function, each supervisor received 20 hours of training in "democratic discussion leadership". ("I wish my boss would treat me," one supervisor was overhead saying, "the way I'm expected to treat my subordinates.") Meanwhile the union was carefully informed as to what management intended to do.

Some employees were quite suspicious of the plan. IndCo had always designed jobs to minimize employees' discretion, and the company had never listened to their ideas. They were not sure that IndCo was serious about listening now.

In spite of these initial handicaps, QCs in most departments were surprisingly successful at first. Many employees had been in the company for years and had accumulated a host of suggestions. Some, as simple as rotating a machine by 90°, increased production substantially at almost no cost. Employees were pleased to be listened to, after years of having no way to communicate their ideas.

In spite of QCs early success, problems began cropping up. Employees complained that their suggestions were carefully listened to, those cutting costs were accepted, but those improving safety or making work easier were ignored. Workers complained that management had used employees' ideas to increase efficiency, but was giving nothing back in exchange. At the same time, employees began contrasting the theoretically democratic process in the QCs with the continuing autocratic approach which most supervisors took on the job. After they ran through their initial set of suggestions these employees felt little

incentive to offer new ones. Some groups spent increasing time on individual grievances.

Supervisors felt threatened by the process. Meanwhile, higher management's initial enthusiasm also began turning sour. From management's viewpoint many QC suggestions were half-baked and, regardless of any long-run savings, would have been quite costly to implement, at a time when cash-flow was the Number One corporate objective. In any case, management hadn't expected the process to be more than a morale builder and paid little attention to it.

Nevertheless several groups contributed ideas worth implementing. One group suggested a job rotation scheme which increased flexibility considerably. When the union heard of it, however, it protested that the scheme would violate hard-won rules preventing one employee from taking another one's job.

Employees gradually lost interest. Those who had supported the plan most enthusiastically at first became most disillusioned. Eighteen months after the plan was introduced, the company made large layoffs. A few groups continued to meet perfunctorily, accomplishing little. After 3 years the plan was essentially dead, and management was looking for a different short-cut to increasing productivity.

Problems and Possible Solutions

Our case illustrates the problems which, according to research, frequently bedevil participation. The section which follows examines these problems in greater detail and makes some suggestions as to how they might be handled. Though our solutions are advanced somewhat tentatively, unless these fundamental problems are resolved in one way

or another, the chances for participation succeeding in any given situation are low.

Employee support

Employee support is the most fundamental requirement for successful employee participation. There are a variety of reasons why employees may resist participative plans.

1. Not all employees want the added responsibilities or enriched jobs that participation provides (Fenwick & Olson, 1986, p. 515; Leitko et al., 1985); many would prefer their secure routines to remain unchanged. At Xerox, for example, "88 percent of the employees valued the idea of employee participation, but only 40 percent wanted to participate via an EI problem-solving group" (U.S. BLMR, 1988, p. 11). Professionals tend to value participation more than nonprofessionals.

2. The topics about which participation is permitted may be confined to matters of only modest importance (Bradley & Hill, 1983): the color of walls, the food in the cafeteria, and so forth. In some instances, participative meetings are seen as little more than managerial pep talks, with little opportunity for employee input. Under these circumstances employees conclude that participation is a meaningless, "Mickey Mouse" exercise.

3. The problems discussed may not be resolvable at the work-place level. Instead, they may require major changes in corporate policies or substantial new investment. Employees may not have the skills or knowledge to make useful suggestions in these areas. (There is some evidence that participation tends to be more successful among

professionals and skilled trades workers -- who have skills, relevant knowledge, and discretion -- than it is among unskilled employees.)

4. Employees may fear retaliation if they make suggestions which point out areas where their supervisor has fallen down on the job, or suggest ideas that supervisors should have thought of by themselves. Consequently, employees may hesitate to make suggestions at all.

5. As suggested in the IndCo case, the democratic atmosphere of the participative group may be so inconsistent with ordinary managerial practices that workers suspect management of hypocrisy and insincerity.

6. As mentioned earlier, participation programs are often coupled with the elimination of work rules and a large reduction in the number of job classifications. While these work rules may limit management flexibility to increase productivity, they also limit management's ability to move employees arbitrarily away from desirable jobs, and so forth. Participation will be resisted unless it is coupled with other ways of protecting employees from arbitrary management authority.

7. Both the flexibility given to management and the new ideas generated through participation can lead to employees' skills becoming obsolete. To the extent that status and pay are based on skills, participation can threaten senior employees.

8. Employees often concern that participation will lead to job loss. This is not an unreasonable concern, since management's main purpose in introducing participation is often to increase efficiency and cut labor costs.

9. Finally, as discussed below, if participation does increase in productivity, employees will feel quite resentful unless they share the benefits.

Possible solutions. The solutions to these problems are easy to suggest, but often difficult to implement.

1. Individual employees can be given the choice of working on either redesigned or traditional jobs (and in a few companies the two forms of work exist side by side). In fact, various representative committees and consultative systems permit self-selection; the minority who take part includes those who are most anxious to participate and who probably have the most to offer.

2. The simplest way to ensure that employees perceive participation as meaningful is to make sure that the participation is meaningful in practice. Participation should involve issues of employee concern. Training should be provided so that employees can make meaningful suggestions; members of Japanese quality circles, for example, often receive training in statistical quality control techniques (Cole, 1989). Further, jobs should be designed to increase the range of matters over which employees can exercise discretion.

3. Employee need to be trained to run meetings, to solve problems, and to increase their technical skills. Participation also relies on training to socialize workers and promote identification with the company.

4. As we discuss below employees are likely to engage in participation only if participation is associated with increased job security and their participative efforts are financially rewarded.

Supervisory support

Participation is resisted and sometimes sabotaged by middle- and lower-level managers and especially by supervisors (Klein, 1984; Bradley

and Hill, 1983; Kochan, Katz, and Mower, 1984; Walton, 1980). For employees, one of the main advantages of participation is the greater freedom to make decisions on their own, rather than having bosses hovering over them. This same freedom may be threatening to supervisors and managers. Among the problems are the following:

1. Participation threatens supervisors' authority and status. Employees are encouraged to make decisions on their own. Discussions in QCs may reveal managers' mistakes. Autonomous work teams are encouraged to contact staff people and suppliers directly, thus by-passing line supervisors.

2. Supervisors' very jobs may be threatened. In some cases job redesign may lead to one or more levels of management being eliminated, as occurred at Ford's Sharonville plant (Kusnet, 1989).

3. First-line supervisors feel discriminated against. They are forced into a system that typically they had no part designing. As in IndCo, they are forced to share their own power, but don't see their bosses sharing theirs. In some cases, they see guaranteed job security for employees, but none for themselves.

4. American management has always stressed the division between managers who know and plan, and employees who execute. As justification of this division, there has been an ideology that stresses employees' incompetence to participate in decision-making. Many first-line supervisors are firmly convinced that quality circles have nothing to teach them (Bradley and Hill, 1987, p. 75). If managers are forced to listen to their subordinates, they are often uncertain as to what they are supposed to do, and this is very threatening. Yet, participation is unlikely to take root if it is confined to an occasional committee

meeting, while day-to-day work-place relations between employees and their supervisors remain autocratic.

Managerial attitudes such as these may threaten participation's success. Research suggests, for example, that the success of the Scanlon Plan in various plants is directly related to the degree to which managers' believe that their subordinates are in fact capable of making worthwhile suggestions (Ruh, Wallace, and Frost, 1973). Where such trust is lacking (for example, where the supervisor views participation merely as a morale builder), the parties may go through the motions of "counterfeit participation" (Heller, 1971), but the desired payoff in terms of productivity and satisfaction may not be obtained.

Possible solutions. A variety of approaches can reduce management opposition. First, it is important to note that power is not "zero sum" (Likert, 1961): increases in employee discretion need not come at the expense of lower management. Where the parties are at loggerheads, neither side has much power. Effective participation, on the other hand, can increase everybody's power.

Managers are more likely to feel comfortable in the new system if they have had a voice in its design. Retraining managers in the leadership, coordination, and planning skills upon which participation relies is almost essential. Managers will also be more likely to support participation if they share in the organization's profits and if part of their performance rating is based on their QC's success.

Successful implementation of participation requires that top management give the program continuing support. Top management must reward middle- and lower-level managers for successful participation

among their subordinates. This may require wholesale modifications in the overall organizational culture. As Howard Love, President of National Steel, put it: introducing shop-floor participation in his company involved changing "an old-line hierarchical organization into a more participative company from the executive suite to the shop floor." (Hoerr, 1988, p. 465).

Changing long-established organizational culture may be quite difficult, though the success of Toyota at NUMMI suggests it is possible. In any case, participation may be easier to introduce in completely new organizations not encumbered by the heritage of past practices.

Finally, if job redesign leads to a reduction in the number of supervisors, those who become redundant should be transferred within the organization. Later we discuss how ordinary employees need job security if participation is to work. The same holds true with regards to management.

Union support

Though unions overall have become somewhat more favorable toward participation over the last ten years, the transition has been painful. Today union attitudes are spread along a continuum between "militant" and "cooperativist" extremes, with many leaders uncertain where they stand (Katz, 1986; Gershenfeld, 1987). Noting that participative programs have been introduced by some militantly anti-union companies, many unionists still view these as chiefly union-busting techniques (Parker, 1985). They see them as forms of manipulation and "speedups in disguise," and as attempts to deflect employees' attention from their

economic problems. And some participative schemes, in fact, were agreed to by management with the ultimate objective of persuading workers to negotiate away their jobs (Hoerr, 1988, p. 444).

Unionists are particularly leery of participation programs that management introduces unilaterally, without consulting them. But regardless of how such programs are introduced, they are likely to affect pay, promotional ladders, and job descriptions. One study found that three-quarters of the quality-of-worklife programs in unionized plants dealt with topics subject to the grievance procedure (Cohen-Rosenthal, 1980). The thrust of collective bargaining in the U.S. has been to rigidify and codify personnel practices. In the typical unionized plant, decisions as to the allocation of work among employees are made on the basis of collectively bargained seniority and job classification rules. Many employees believe strongly that these rules give them quasi-property rights in their jobs, rights which they are willing to fight hard to preserve.

Thus participation schemes are often resisted because they threaten these long-enjoyed rights. Job enrichment blurs the boundaries between jobs and disturbs established promotional ladders. In the plants with the most advanced forms of participation, decisions as to the allocation of work are made by work teams on a flexible ad hoc basis. Autonomous work teams may even determine pay and discipline -- blurring the sharp lines between managers and workers that American unions have sought to maintain.

In short, the participation movement involves a tradeoff of predetermined rules for promises of greater participation in the management of work on a day-by-day basis. Traditional negotiations

involve higher-level officers; by contrast participative decision-making occurs at the workplace level, thus by-passing these officers. Transition from one system to another is difficult.

Transition is particularly likely to be difficult if changes in work rules have been introduced only after determined worker resistance. Not infrequently, management has set unions in two plants competing against each other, offering to make investments in the plant agreeing to the greatest change in work rules and threatening to close the other.

Job redesign and participation can potentially increase flexibility by trading off job rule protections for flexible work assignments, coupled with worker input into job design and day-to-day performance. In actuality, the managers of many firms embrace the flexibility of weakened work rules and increased ability to reassign workers, but do not deliver substantive worker participation as a quid pro quo. The result is often unhappy workers with fewer job rights and distaste for "participation."

Complicating matters further, many participative programs in unionized plants have been introduced in the context of concession bargaining. Thus, member attitudes toward participation have been heavily colored by their attitudes toward concessions (Katz, 1986). Concession bargaining has become an issue in many union elections, with some officers being defeated because they have been viewed as coopted by management.

Still another problem: In large companies participation may generate a "parallel organization" (Goldstein, 1985) in the union, a hierarchy of union-selected but company-paid participation

"facilitators" who may rival the traditional adversarially oriented union hierarchy (Parker, 1985; Kochan, Katz, and Mower, 1984). Jealousy may occur between the two branches, especially if the traditional union leadership views the participators as "selling the union out." (There are similar tensions on the company side between (1) line managers and industrial engineers and (2) the Human Resources or Organizational Development specialists who are responsible for participation's implementation.)

Possible solutions. Understandably the union is less likely to resist if it is an equal partner in designing the participative program, as is occurring increasingly. Indeed there is some evidence that QCs introduced in unionized settings are more likely to last than those introduced in non-union plants (Drago, 1988). There are at least two reasons why this may be the case: (1) unions may screen out badly designed plans; (2) unionized employees may be less afraid to express their opinions, even if they are critical of management.

Below we stress the significance of guarantees of job security and gain-sharing as means of reducing employee resistance. These promises become more credible if the union is in a position to guarantee them.

Given the tension between collective bargaining and cooperative efforts, unions have sought to negotiate guarantees which provide that the collective bargaining agreement is not to be superceded except by specific joint consent. At Xerox, for example, the parties distinguished between "on line" topics, which can be discussed by QWL teams, and "off line" subjects which are covered by collective bargaining (Kochan, Katz, and Mower, 1984). In practice, however, the rigid separation between participation and collective bargaining was

difficult to maintain at Xerox (and elsewhere). All was simple as long as the participative team confines itself to purely housekeeping issues. But, once the group began exploring possible means of cutting costs or making changes in job assignments and pay, it inevitably impinged on matters which relate directly to the heart of collective bargaining. In companies which have moved into more advanced forms of participation, such matters are typically referred to the kinds of plant- or company-level representative union-management committees which we have previously described.

> Example: The recent contract between the San Diego Teachers Association and the San Diego School District provides for a framework of joint committees to develop proposals for "educational reforms," such as new class schedules, with a top level joint committee being authorized "to waive contract provisions which interfere with their implementation." (CPER Extra Edition, 1989, p. 1).

Thus, there are strong pressures to extend the scope of participation beyond the strictly shop floor level, if for no other reason than this permits union officials to become involved in the participative process. Union support may well be lost if participation is confined to the workplace.

As with management support, participation is more likely to enjoy union support at low levels if it is also supported by higher-level union officials. Firms that implement participation at one plant while fighting unionization at another plant will often run into difficulties with higher levels of the union hierarchy.

Gain sharing and equitable pay

Pay is a problem for most participative schemes. In the short run, participation may be its own reward: employees often appreciate the opportunity to make suggestions and appreciate any safety and quality of work life improvements that are implemented. In the long run, however, psychic benefits are not enough. Workers see themselves doing supervisors' work without supervisors' pay. Further, if participation contributes to increased profits, employees want to share the benefits.

When participation is part of a concession bargaining package in which employees are forced to accept pay cuts, inequities can also arise. An implicit understanding in most concession bargaining was that there would be "equality of sacrifice." In numerous cases, however, management violated this expectation by such acts as raising managerial salaries shortly after workers accepted substantial pay cuts or by breaking implicit understandings not to shut down plants. Too often management insensitivity to workers' feelings (and good public relations) did much to dissipate early good will.

Finally, traditional pay schemes tie wages to the job being performed and assume that each employee performs a clearly distinguishable job. Such schemes makes employees unwilling to leave jobs which pay well, and make employees leery of new technology that threatens current skills. Understandably senior workers are likely to resist change which might reduce their relative pay advantages. Thus, when participation programs blur job boundaries (as many do) traditional pay schemes become outmoded.

Possible solutions. Some sort of profit or gain (and loss) sharing is a key element in any but the most superficial participation programs.

Gainsharing helps motivate employees to work more cooperatively and efficiently; it makes them more amenable to changes that increase productivity; it provides feedback which informs them as to the success of their efforts; and perhaps most importantly, it satisfies their needs for equitable treatment. Group efforts, particularly group effort toward maintaining norms of high productivity, can only be rewarded by group-based compensation.

There is increasing evidence that gainsharing and participation are mutually reinforcing; each is more effective if offered in conjunction with the other. Indeed the evidence suggests that ESOPs and profit-sharing plans are likely to have an only limited impact on performance unless they are combined with participation (U.S. GAO 1987; Quarrey and Rosen, 1986; Kruse 1988).

As discussed in another paper in this series, there are numerous forms of gain sharing programs. These range along a continuum from individual and group incentives through cost-saving-sharing plans (such as the Scanlon and Rucker Plans) to profit-sharing and Employee Stock Ownership Plans. Individual incentives can be very effective in the short run, and for encouraging specific behaviors. Over the long run, however, individual piece rates and related schemes discourage cooperation and the growth of cooperative work groups, and are harder to develop equitably.

The classic problem with group incentive plans is the "free rider" who shares the group's gain without doing his or her share of the work. This problem can be reduced if work-group members police each other. Peer pressure, in turn, is more effective when there are long-term employment relations, as we discuss later on.

ESOP and profit-sharing plans, which reward organization-wide performance, are likely to develop feelings of organizational commitment and fair treatment rather than specific motivation for harder work.

In addition to sharing gains, many participatory firms are moving toward pay-for-knowledge programs. Here employees are paid based on the number of jobs they have learned to perform. Pay-for-knowledge programs give employees an incentive to learn new jobs: human capital is increased. Greater knowledge also broadens the range of issues about which employees are capable of participating. Beyond this, if workers are paid for what they know rather than what they are doing at the moment, they may be less likely to resist being moved from one task to another. Thus pay-for-knowledge may promote flexibility in work assignments (U.S. BLMR, 1986).

Status equalization

Regardless of the level at which it occurs, participation tends to equalize job responsibilities and to decentralize decision-making. Further, a considerable range of research (Deutsch, 1985; Cook and Hegvedt, 1983; Lazear, 1987; and Levine; 1989) suggests that successful participation is accompanied by a reduction in status differentials. If management insists on preserving all of its traditional privileges and advantages, little real participation will occur.

Many of the best-publicized participation experiments have been accompanied by important changes in status symbols. These have begun to reduce what a prominent union leader called:

> "the double standard that exists between workers and management... Workers challenge the symbols of elitism typically

taken for granted, such as salary payments versus hourly payment; time-clocks for blue-collar workers; well-decorated dining rooms for white collar workers vs. plain, Spartan-like cafeterias for blue-collar workers; privileged parking for the elite but catch as you can for workers." (Bluestone, 1974, p. 47).

At the Gaines dog-food plant, for instance, there were no reserved parking lots, no time clocks, and no differentiation between management offices and worker lounges. Workers were free to make phone calls on company time (just like management). Many Japanese-owned plants in the U.S. require all employees, management and workers, to wear similar uniforms. Often employees are called "associates" or "team members" rather than workers. Such reductions in status differentials not only tend to reduce dissatisfaction, they also help develop an atmosphere of trust and confidence between workers and management and so reinforce the atmosphere of participation.

Participation may also blur the traditional sharp distinction between union members and management. Aside from union members performing many typical management functions, at NUMMI (and under recent steel industry contracts) a new position of "team leader" has been established -- a union member with many managerial responsibilities.

Participation is often accompanied by reductions in wage differentials. For example, a strong case can be made for equal pay for all members of autonomous work teams where members constantly rotate duties (Goodman, 1979). Many gain-sharing and profit-sharing programs are related to group performance; most group incentives reduce within-

group pay differentials and thus reinforce the feeling that everyone is in the same boat.

Job security

Employees are unlikely to cooperate in increasing efficiency, if they fear that by so doing they jeopardize their own job security. Guarantees of job security reduces employees' fears that high productivity will lead to layoffs.

Job security serves numerous other purposes: it makes employees more receptive to new ideas and more comfortable presenting their own new ideas. It helps persuade employees to forgo short-term gains in order to build a more effective organization. It gives employees a chance to feel that their efforts on behalf of their work group will pay off. Indeed successful participatory systems depend in part on employees monitoring one another in order to maintain group norms of high effort; if an employee expects to be in a work group for a longer period of time, the sanctions of the group will be a more important motivator. Further, from a firm's point of view, time is needed to socialize employees, and to recover the higher investment in human resources that accompanies participation.

Possible solutions. Substantial job security and long-term employment relations (if not life-time employment) are important elements in the human resources policies of such "high-commitment firms" as Hewlett-Packard and IBM. Important steps toward providing life-time employment have also been taken in recent union-management contracts, especially in the auto and steel industries. Two types of policies help provide job security.

1. Internal justice systems (whether union grievance procedures or the equivalent) that provide due process protections, appeals procedures, and guarantees that discipline will be for "just cause" only (rather than "at will"). These policies reassure workers that they can participate without fear of punishment, and lower turnover by giving dissatisfied workers alternatives to quitting.

2. Employment policies designed to avoid layoffs. High commitment companies reduce layoffs by a variety of means: through transferring workers to other divisions or locations, where feasible; through financing truly voluntary early retirement programs; through reductions in hours and in contracting out; and through assigning temporary surplus employees to maintenance work or training programs (economists call this "labor hoarding").

Example: In contrast to standard automobile industry practice, NUMMI went through a considerable period of slow orders without layoffs. Instead, training programs were greatly intensified. In return, NUMMI workers have demonstrated their willingness to work a pace at least slightly higher than the industry standard.

Job Security policies can promise not make layoffs when job requirements have been reduced due to new technology or to ideas which are generated by employees. Stronger versions may even promise never to have layoffs.

To make such policies feasible, during periods of peak demand high commitment firms often contract work out and make use of "contingent" part-time or temporary employees. Thus firms are able to protect their permanent "core" of employees, the ones who are expected to do the participating.

Avoiding Plateauing

As illustrated in our IndCo case, many shop floor participation programs plateau and decline. After initial successes, interest begins to wane, the agenda of easily solvable problems grow smaller, and meetings become less frequent (Walton, 1980; Griffin, 1988; Accordino, in press). Particularly in assembly lines or other settings where workers discretion has been minimized, a QC can quickly run out of problems for which employees are qualified to participate -- at least without running into management resistance. In short, keeping participation programs going may be more difficult than getting them started. Without continuous effort, they may simply atrophy. The difficult trick is to institutionalize participation so that all parties feel rewarded by the process and make it a habit.

Possible solutions. The chances of plateauing may be reduced with the twin strategies of pushing authority downward, and extending participation upward.

Pushing authority downward implies expanding the scope of participation. Quality circles can be transformed into autonomous work teams and given the authority to implement (not just suggest) solutions to certain problems. Providing a QC a budget, increasing the training of its members, and permitting the workers to interact directly with engineering, marketing, and other staff departments can increase workers' abilities to participate.

Successful participation in the long run can involve letting work groups have discretion over maintenance, quality control, work organization, and so forth. At some firms, influence has moved upwards

to include hiring, compensation practices, choice of technology, and investment.

Pushing participation upward involves participation at the plant or organization-wide levels. When one shopfloor group starts changing technology, what it does may affect other work groups. Representative committees (such as the Screening Committees in Scanlon Plan Companies or the Labor Team in the New York City Sanitation Department) can coordinate decisions across groups.

Ultimately participation may include employee representation on top management councils or even on the Board of Directors. This last step may take a long time to achieve, but it should not be rejected out of hand. The important thing is that workers have a say as well as a stake in how the organization is run and where it is going.

Policy

Normally, economists are wary of interfering with the operations of the free market. There are, however, three market imperfections concerning participation which warrant public policy intervention: (1) there are externalities from work organization (i.e., one company's choice of work organization affects the environment of other firms); (2 nformation about workplace innovations is a public good; and (3) the government itself is a major employer. These three market imperfections suggest a role for government to (1) provide a supportive environment for participation; (2) disseminate information; and (3) act as a model employer.

Provide a supportive environment

Our analysis, so far, has focussed on conditions within the firm. The firm's environment affects the success of participation; in turn, the organization of work at a single firm affects the environment of other firms. Below, we describe how the nature of a firm's product, labor, and capital markets and the legal environment can create problems for participation. As is usual in the presence of externalities, government intervention may be able to increase efficiency.

Product Market. As we have argued above, the chances of participation being successful are increased if workers are guaranteed considerable job security. However, firms with policies of avoiding layoffs are particularly badly hit when demand for their output declines -- other companies can reduce costs through layoffs. Consequently public policies which encourage economic stability also lower the costs of job security, and are likely to encourage the growth of participation. (There is evidence that economic crises can prod management, workers, and unions to initiate participatory experiments; nevertheless, stability of demand reduces the costs of maintaining participation.)

At the same time, when participative firms hoard employees, they help to moderate downturns: unemployment rises less and aggregate demand is stabilized. The more firms that avoid layoffs, the more stable our economy becomes. Thus, participation fosters stability, and stability fosters participation.

Changes in the unemployment insurance (UI) system can reduce the cost of providing job security. Granting partial UI for partial layoffs (i.e., job sharing), increasing the experience rating of UI, and

releasing Jobs Training Partnership Act funds for workers who have not yet been laid off will eliminate the current subsidy that labor-hoarding firms pay to those companies that lay off workers.

Labor Market. If the new Administration is to meet the high job-creation goals announced during the recent Presidential campaign, extremely low levels of unemployment will be needed. High unemployment works to the relative advantage of firms that rely upon the threat of unemployment to motivate workers. When unemployment is low, participatory firms gain in relative productivity. As noted above, in Sweden the initial impetus for job redesign came from the fact that workers refused to work at boring jobs when there was low unemployment (Cole, 1989). As long as firms draw benefits from unemployment to discipline workers, high employment may not be sustainable. Therefore, encouraging participation may be a requirement of a rapid increase in employment. Conversely, high employment rates will make participation more feasible (Stern, 1982).

Capital Market. Participative policies are more likely to pay off in the long run than in the short run. They require considerable investment in human resources, especially training. They also require employers to avoid laying off employees during recessions and perhaps to pay above-average wages, since any equalization of wages is likely to be upwards. If proponents of participation are correct, all these investments will eventually pay off. For accounting purposes, however, these costs are "expenses," not tangible "investments." Thus, in the short-run they reduce profits and cash flow.

The recent wave of takeovers, levered buyouts, mergers, and restructuring often lead to firms having high debt loads and desperate

needs for cash flow. Although not all takeovers are undesirable, many liquidate their human assets at a fast rate. Takeovers whose profits come from reneging on promises to workers should be discouraged -- each such reneging makes it harder for remaining high-commitment strategies to work.

Capital market imperfections can be addressed by any means that lengthen managers' and investors' horizons. Proposals others have made include: a small transactions tax on stock sales, to reduce speculation; stock voting rights that increase with length of ownership; removing the tax subsidy for financing with junk bonds; changing the tax laws to encourage long-run remuneration of executives; and treating training costs as investments on corporate balance sheets (at least as footnotes), in order to make human resource investments more visible (Flamholtz, 1985).

Legal environment. There are serious legal questions as to the extent employers may discuss "conditions of employment" with company-sponsored committees of employees. If the company is non-union, such a committee might be held to be a "company union." If a union is certified, dealing with such a committee without the union's consent might violate the union's exclusive bargaining rights (Sockell, 1984). There are still further questions as to whether union representatives may serve on company boards of directors, since they are then acting as management. Furthermore, if representatives from the same union sit on several boards, there may be anti-trust problems.

The solution here is obvious. The National Labor Relations Act should be revised to make it clear that participation programs are legal

in both union and non-union settings, as long as their purpose is neither to bypass nor to avoid unions.

The legal environment also has indirect affects on participation. As noted above, guaranteed individual rights facilitate participation. These rights, such as just-cause employment protection, can lead to adverse selection -- that is, low quality workers will try to obtain jobs at firms with better employee rights. If the government mandates such rights universally, the costs of adopting participatory schemes will be lowered (Levine, 1987).

Disseminate Information

If knowledge about the characteristics of successful participation plans were widespread, the organizations that introduced participation would make fewer mistakes. Just as the federal government has a role subsidizing and disseminating scientific research, it has a role subsidizing basic workplace research, and disseminating the results through publications and conferences. In Japan, for example, there is an average of two conferences on QC's every day (Cole, 1989).

The Bureau of Labor Management Relations and Cooperative Programs has performed a very useful function in publicizing workplace innovations. So has the Federal Mediation and Conciliation Service. Area Labor-Management Committees, university research centers, and private agencies (e.g., Work in America, and the National Center for Employee Ownership) have also proven to be effective disseminators of research.

While there is no question that the government must do more to disseminate information, it also can do more to produce knowledge. If

any fraction of the ambitious research program described below is to be carried out, federal financial assistance will be needed.

Government as employer

The combined federal, state, and local governments of the U.S. employ 16 percent of the work force. The government attempts to approximate private sector "best practices" in setting wages, hiring standards, and so forth. Similarly, it makes sense for the federal government as employer to learn from the successful participation experiences of both the private and public sectors.

There have been numerous successful public-sector participation plans. Some examples are engineers at the TVA, and the sanitation workers in New York. The federal government should encourage departments and agencies to introduce participation. While participation should not be mandated from above, high-level leadership can contribute to workplace changes.

Small seed grants have been shown to be effective at spurring innovation at the local level (Accordino, in press).

Further Research

The effects of participation at work has been a major research question in the social sciences for generations. Nevertheless, several basic questions remain.

Much past research has examined whether an undifferentiated concept called "participation" works. At this point the answer is clear: "Sometimes." The next step is to determine the circumstances which are favorable for the success of each major form of participation. To carry out research on what makes participation successful, we need to look at

both successes and failures. With some notable exceptions (e.g., Cammann, et al., 1984; Goodman, 1979) there is a natural tendency to focus on successful participation plans.

Research in this area will face numerous difficulties. Participation programs are introduced in a variety of situations. What succeeds with skilled craft workers in a small company may fail with unskilled workers on an assembly line. At the same time, different plans are adopted for different purposes and have a variety of payoffs.

Ideally, performance measures such as productivity, quality, and satisfaction should be used to measure the success of participation plans. A broad-based survey could use financial data to calculate total factor productivity, and correlate performance with various measures of participation. The participation measures should include measures of the level, form, scope, and power of any participatory institutions. Because participation plans can continue to "survive" after they have lost effectiveness, it is useful to measure such dimensions as the number of workers involved, number of meetings per month, number of suggestions implemented, the topics covered, and so forth. Such a project might be carried out by supplementing the Longitudinal Establishment Data with survey measures.

The literature we surveyed above suggests a large number of determinants of success. We can try to relate the success of plans to the presence of employment security, the form of gain sharing, the skill level of employees, the attitudes of upper and lower management, the immediate impetus for introducing participation, the amount and form of training, the extent and nature of assistance provided by staff department and outside consultants, and so forth.

While much needs to be done to measure the outcomes of various sorts of participation in various situations, perhaps even more effort has to be devoted to studying the dynamics of the participative process. Research is required on the problems faced at each stage of the participation process; how these are problems solved; and how long-lived plans avoid plateauing. Such research requires individual case study research and participant observation.

The output of this research program would be a better understanding of how the firm's environment and the characteristics of the participation plan lead to differences in success.

Conclusion

Programs under which employees participate in workplace decisions have received much attention in recent years, in part because of the apparent success of participation in Japanese firms. A large number of U.S. companies have also experimented with worker participation programs, especially quality circles and autonomous work teams.

Employee participation programs operate by tapping workers' knowledge; by satisfying employee needs for involvement; by reducing supervision; by building worker commitment and trust; and by improving union-management relations.

In a majority of empirical studies, direct participation is associated with at least a short-run improvement in one or more of the following variables: satisfaction, commitment, quality, productivity, turnover, and absenteeism. In almost no cases does participation make things worse. Nevertheless, only a small proportion of participation

plans can be classified as long-term successes. After a brief honeymoon, most plans peak and peter out.

Sustained long-run improvements in performance occur when participative groups are given the information and authority to make substantial changes in the workplace. Day-to-day supervisory behavior must be altered so that formal participation plans are consistent with the way things are normally done.

The pay plan must reward workers for increased responsibility and productivity. Furthermore, job security and guarantees of individual rights are prerequisites for workers to feel free to participate. Managers, like workers, must be rewarded for successful participation.

Successful participation requires the development of trust. Employees need to believe that participation is not merely a means of speedup or a threat to their jobs. In a unionized context they must be persuaded that it is not a pretext for cutting back work-rule protection or for breaking the union.

Given these requirements, the fact that most quality circle and related participatory plans have few long-run effects is, therefore, not surprising. Too many plans are merely pasted onto organizations that remain fundamentally unchanged.

Policy Recommendations:

» The government should subsidize research, demonstration projects, and the dissemination of research concerning participation. This effort will lower the costs of introducing participation, and help the parties avoid the mistakes others have made.

» The administration should encourage the introduction of participation within federal agencies. Participation's potential advantages of

committed workers, flexibility, higher quality, and so forth are valuable in the public sector as well as the private.

» The National Labor Relations Act should be revised to make it clear that participation programs are legal in both union and non-union settings, as long as their purpose is neither to bypass nor to avoid unions.

» Continuity of employment is an important condition for participation plans. Encouragement of participative plans is therefore one of the many benefits associated with full employment. Granting partial unemployment insurance for partial layoffs (i.e., job sharing), increasing the experience rating of unemployment insurance, and releasing Jobs Training Partnership Act funds for workers who have not yet been laid off, will reduce the indirect subsidy that firms that lay off workers receive from firms that strive to maintain full employment.

» Participation plans often take some initial investment in time and effort before improvements are seen. Any actions that the government could take to lengthen the time horizons of managers and investors would make it easier for firms to invest in participation.

» More research is needed, especially to understand how to avoid those pitfalls which make so many programs fail.

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